Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL QUALITY MEASURES CLEARINGHOUSE

General

Title

Medication reconciliation post-discharge: percentage of discharges from January 1 to December 1 of the measurement year for patients 66 years of age and older for whom medications were reconciled on or within 30 days of discharge.

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2015 technical specifications for ACO measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of discharges from January 1 to December 1 of the measurement year for patients 66 years of age and older for whom medications were reconciled on or within 30 days of discharge.

Note from the National Quality Measures Clearinghouse (NQMC): For this measure, there are both Electronic and Hybrid Specifications. This NQMC measure summary is based on the Electronic specification. Refer to the original measure documentation for details pertaining to the Hybrid specification.

Rationale

Medications are a significant part of care for elderly patients. Patients 65 years and older take more than 30 percent of all prescription drugs (Sorenson et al., 2004). Adverse reactions to medicines are implicated in 5 to 17 percent of hospital admissions, but many medication problems could be prevented by monitoring drug therapy and identifying patients at risk (Knight & Avorn, 2001).

Medication use in the elderly is an important topic for research and targeted quality improvement in clinical practice. Researchers at the University of Colorado Health Science Center at Denver reviewed the medications of 375 patients aged 65 or older, 24 to 72 hours after discharge from the hospital, and found that just over 14 percent experienced at least one medication discrepancy. Forty-nine percent of these discrepancies could be attributed to the system. Patients with discrepancies were approximately 2.5 times more likely to be readmitted within 30 days of discharge (Schoen et al., 2005). Thirty-four percent of patients who participated in a patient survey reported that they experienced medical mistakes, medication errors or lab errors; the number of patients increased by 14 percent if they had four or more physicians providing care (Wagner & Hogan, 1996; Ernst et al., 2001).

Annually there are more than 2 million serious adverse drug reactions and about 100,000 deaths due to medication problems (Coleman et al., 2005). Noncompliance, nonadherence, lack of communication between patients and physicians and the burden of taking multiple medications can result in drug interactions, adverse drug events, drug overuse and drug underuse. Adverse drug events are a leading cause of morbidity and mortality. A January 2002 Institute of Medicine (IOM) report stated that annually there are between 44,000 and 98,000 deaths as a result of medical errors, while an estimated 7,000 deaths result from adverse drug reactions (Committee on Quality Health Care in America, 2002). If medication reconciliations are used, potential adverse drug events can be identified and prevented. In one study, the use of medication reconciliation led to a drop in the percentage of patients affected by adverse drug events from 36.9 percent to 9.3 percent (Committee on Quality Health Care in America, 2002).

Evidence for Rationale

Coleman ET, et al. Post-hospital medication discrepancies: prevalence, types, and contributing factors. Program and abstracts of the Society of Hospital Medicine Annual Meeting. Chicago (IL): 2005 Apr 29-30. Abstract 13 p.

Committee on Quality Health Care in America. Institute of Medicine. To err is human: building a safer health system. Washington (DC): National Academy Press; 2002.

Ernst ME, Brown GL, Klepser TB, Kelly MW. Medication discrepancies in an outpatient electronic medical record. Am J Health Syst Pharm. 2001 Nov 1;58(21):2072-5. PubMed

Knight EL, Avorn J. Quality indicators for appropriate medication use in vulnerable elders. Ann Intern Med. 2001 Oct 16;135(8 Pt 2):703-10. PubMed

National Committee for Quality Assurance (NCQA). HEDIS 2015: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Schoen C, Osborn R, Huynh PT, et al. Taking the pulse of health care systems: experiences of patients with health problems in six countries. In: Health Affairs Web Exclusives; 2005 Nov 3

Sorenson L, Stokes JA, Purdie DM, Woodward M, Elliott R, Roberts MS. Medication Reviews in the community: results of a randomized, controlled effectiveness trial. Br J Clin Pharmacol. 2004 Dec;58(6):648-64.

Wagner MM, Hogan WR. The accuracy of medication data in an outpatient electronic medical record. J Am Med Inform Assoc. 1996 May-Jun;3(3):234-44. PubMed

Primary Health Components

Medication reconciliation; elderly

Denominator Description

Discharges for patients age 66 years and older as of December 31 of the measurement year who had an acute or nonacute inpatient discharge on or between January 1 and December 1 of the measurement year (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Medication reconciliation conducted by a prescribing practitioner, clinical pharmacist, or registered nurse on or within 30 days of discharge (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

All HEDIS measures undergo systematic assessment of face validity with review by measurement advisory panels, expert panels, a formal public comment process and approval by the National Committee for Quality Assurance's (NCQA's) Committee on Performance Measurement and Board of Directors. Once NCQA establishes national benchmarks for accountable care organization (ACO) performance, all measures will undergo formal reliability testing of the performance measure score using beta-binomial statistical analysis. Where applicable, measures also are assessed for construct validity using the Pearson correlation test.

Evidence for Extent of Measure Testing

Rehm B. (Assistant Vice President, Performance Measurement, National Committee for Quality Assurance, Washington, DC). Personal communication. 2015 Apr 8. 1 p.

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Accountable Care Organizations

Ambulatory/Office-based Care

Hospital Inpatient

Transition

Type of Care Coordination

Coordination between providers and patient/caregiver

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Multisite Health Care or Public Health Organizations

Statement of Acceptable Minimum Sample Size

Specified

Target Population Age

Age greater than or equal to 66 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Effective Communication and Care Coordination
Health and Well-being of Communities
Making Care Safer
Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Staying Healthy

IOM Domain

Effectiveness

Safety

Data Collection for the Measure

Case Finding Period

January 1 to December 1 of the measurement year

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Institutionalization

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
Discharges for patients 66 years and older as of December 31 of the measurement year who had an acute or nonacute inpatient discharge on or between January 1 and December 1 of the measurement year

The denominator for this measure is based on discharges, not patients. If patients have more than one discharge, include all discharges on or between January 1 and December 1 of the measurement year.

Note: *Readmission or Direct Transfer*: If the discharge is followed by a readmission or direct transfer to an acute or nonacute facility within the 30-day follow-up period, count only the readmission discharge or the discharge from the facility to which the patient was transferred.

Exclusions

Readmission or Direct Transfer: Exclude both the initial discharge and the readmission/direct transfer discharge if the readmission/direct transfer occurs after December 1 of the measurement year.

Note: If a patient remains in an acute or nonacute facility through December 1 of the measurement year, a discharge is not included in the measure for this patient. However, the organization must have a method for identifying the patient's status for the remainder of the measurement year, and may not assume the patient remained in the facility based only on the absence of a discharge before December 1.

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the NCQA Web site to purchase *HEDIS 2015 Technical Specifications for ACO Measurement*, which includes the Value Set Directory.

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Medication reconciliation (Medication Reconciliation Value Set) conducted by a prescribing practitioner, clinical pharmacist, or registered nurse on or within 30 days of discharge.

Note: *Medication Reconciliation*: A type of review in which the discharge medications are reconciled with the most recent medication list in the outpatient medical record.

Exclusions

Unspecified

Value Set Information

Measure specifications reference value sets that must be used for HEDIS reporting. A value set is the complete set of codes used to identify the service(s) or condition(s) included in the measure. Refer to the NCQA Web site to purchase *HEDIS 2015 Technical Specifications for ACO Measurement*, which includes the Value Set Directory.

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Electronic health/medical record

Paper medical record

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

The Accountable Care Organization (ACO) aggregate population is reported as a whole, with an option to report Medicaid separately for measures for which HEDIS Health Plan Measurement offers Medicaid specifications.

Standard of Comparison

not defined yet

Identifying Information

Original Title

Medication reconciliation post-discharge (AMRP).

Measure Collection Name

HEDIS 2015: Accountable Care Organization (ACO) Collection

Measure Set Name

Effectiveness of Care

Measure Subset Name

Medication Management

Submitter

National Committee for Quality Assurance - Health Care Accreditation Organization

Developer

National Committee for Quality Assurance - Health Care Accreditation Organization

Funding Source(s)

Unspecified

Composition of the Group that Developed the Measure

National Committee for Quality Assurance's (NCQA's) Measurement Advisory Panels (MAPs) are composed of clinical and research experts with an understanding of quality performance measurement in the particular clinical content areas.

Financial Disclosures/Other Potential Conflicts of Interest

In order to fulfill National Committee for Quality Assurance's (NCQA's) mission and vision of improving health care quality through measurement, transparency and accountability, all participants in NCQA's expert panels are required to disclose potential conflicts of interest prior to their participation. The goal of this Conflict Policy is to ensure that decisions which impact development of NCQA's products and services are made as objectively as possible, without improper bias or influence.

Adaptation

This measure was adapted from the *HEDIS Technical Specifications for Health Plans* ("*HEDIS Health Plan Measurement*") and *HEDIS Physician Measurement*.

Date of Most Current Version in NQMC

2014 Nov

Measure Maintenance

Annual

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2013 technical specifications for ACO measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2012. various p.

The measure developer reaffirmed the currency of this measure in November 2015.

Measure Availability

Source available for purchase from the National Committee for Quality Measurement (NCQA) Web site.

For more information, contact NCQA at 1100 13th Street, NW, Suite 1000, Washington, DC 20005; Phone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC Status

This NQMC summary was completed by ECRI Institute on June 12, 2014.

This NQMC summary was updated by ECRI Institute on April 21, 2015.

The information was reaffirmed by the measure developer on November 2, 2015.

Copyright Statement

Production

Source(s)

National Committee for Quality Assurance (NCQA). HEDIS 2015 technical specifications for ACO measurement. Washington (DC): National Committee for Quality Assurance (NCQA); 2014. various p.

Disclaimer

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